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Sandra Pinto de Bader/SPdB OSE Electric Vehicles ORD August 11, 2011 Version #8

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AN ORDINANCE relating to the charging of electric vehicles; authorizing the Director of Finance and Administrative Services, the Director of the Seattle Center Department, the Superintendent of Parks and Recreation, and the Seattle City Librarian to set per-session fees for public use of electric vehicle charging stations in parking facilities owned or controlled by each of their respective departments; making it an infraction and imposing a monetary penalty for an unauthorized vehicle to park in a space reserved for electric vehicle parking while charging; amending Sections 3.39.020, 11.31.121, 17.04.030, and 18.28.010 of the Seattle Municipal Code; adding new Section 11.72.125 to the Seattle Municipal Code; and ratifying and confirming certain prior acts.

WHEREAS, greenhouse gas emissions related to transportation constitute more than fifty percent of all greenhouse gas emissions in the State of Washington; and

WHEREAS, the use of hydro-power, which represents sixty-six percent of Washington's electricity production, as a transportation fuel instead of petroleum fuel, results in significant reductions in the emissions of pollutants including greenhouse gases, is cheaper, and reduces the reliance of the state on imported sources of energy for transportation making electrification of Seattle's transportation one of the most promising opportunities for reducing the carbon impact of our city; and

WHEREAS, the development of electric vehicle infrastructure is a critical step in creating jobs, fostering economic growth, reducing greenhouse gas emissions, reducing our reliance on foreign fuels, and reducing the pollution of Puget Sound attributable to the operation of petroleum-based vehicles on streets and highways; and

WHEREAS, Seattle is one of the first markets in the United States to welcome significant numbers of electric vehicles to our roads, and the creation of a robust charging infrastructure network will remove barriers to widespread adoption of electric vehicles; and

WHEREAS, American Recovery and Reinvestment Act funds have been directed to Seattle for the development of electric vehicle charging infrastructure through the EV Project, for infrastructure in private property, and the Puget Sound Clean Air Agency, for infrastructure in public property; and

WHEREAS, on October 25, 2010, the City Council passed Ordinance 123434 accepting grant funds from the Department of Energy through the Puget Sound Clean Air Agency and allocated through the American Recovery and Reinvestment Act of 2009 for the purpose of installing electric vehicle charging infrastructure; and



WHEREAS, the City has installed electric vehicle charging stations for the use of the City's fleet and is in the process of installing publicly available electric vehicle charging stations in parking facilities owned or controlled by the City; and

WHEREAS, establishing a per-session fee for public use of electric vehicle charging stations in City owned and managed parking facilities would allow for cost recovery, NOW, THEREFORE,

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Section 3.39.020 of the Seattle Municipal Code, last amended by Ordinance 123361, is amended as follows:

3.39.020 Director of Finance and Administrative Services - Functions and Powers

The Director of Finance and Administrative Services' functions and powers include but are not limited to the following:

- S. Set rates for publicly available electric vehicle charging stations in parking facilities owned or controlled by the Department:
- 1. A per-session fee for public use of electric vehicle charging stations in parking facilities owned or controlled by the Department shall be within rate limits established by this subsection 3.39.020.S. In setting rates, the Director is not subject to Chapter 3.02, Administration of the Seattle Municipal Code.
- 2. Such per-session fees shall be set based on expected operating costs and expected vehicle charging station use. For the purpose of this sub-section, "operating costs" shall include electricity costs related to the charging stations, and may include the Department's costs of planning and administration, fees charged by vendors for management services and routine maintenance of the charging stations, facility enforcement costs and other reasonable costs associated with vehicle charging station operations.



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3. The Director is authorized to set electric vehicle charging station fees up to \$7.50 per session (Maximum electric vehicle charging station per-session fee). When charging fees are in effect, per-session fees shall be set no lower than \$1.50 per session (Minimum electric vehicle charging station per-session fee). All electric vehicle charging station fees will be in addition to general parking fees and inclusive of any taxes. After December 31, 2016, the Director is authorized to set electric vehicle charging station fees without regard to the maximum and minimum electric vehicle charging station per-session fees set forth in this subsection.

((S))T. Manage the City's fleet and provide services to other public fleets, in accordance with City policy, including policies that address the environmental and financial impacts of the fleet:

((T))<u>U</u>. Provide a single point of contact to receive and resolve constituent concerns, questions, and complaints; oversee Citywide compliance in responding to public record requests; provide directory assistance for the City; provide information about City government to the public; present constituent concerns to City departments, and strengthen and ensure coordinated departmental responses; and

((U))V. Perform such other activities as may be assigned by ordinance from time to time.

Section 2. Section 11.31.121 of the Seattle Municipal Code, last amended by Ordinance 123659, is amended as follows:

11.31.121 Monetary penalties – Parking infractions.

The base monetary penalty for violation of each of the numbered provisions of the Seattle Municipal Code listed in the following table shall be as shown, unless and until the penalty shown below for a particular parking infraction is modified by Local Rule of the Seattle Municipal Court adopted pursuant to the Infraction Rules for Courts of Limited Jurisdiction ("IRLJ") or successor rules to the IRLJ:



11.72.125 ELECTRIC VEHICLE CHARGING STATION \$42.00

Section 3. A new Section 11.72.125 is added to the Seattle Municipal Code, as follows: 11.72.125 Electric vehicle parking charging station; electric vehicles.

- A. No person shall stop, stand, or park a vehicle other than an electric vehicle within any space marked or signed as reserved for "electric vehicle parking while charging only."
- B. It is unlawful to park or permit to be parked any electric vehicle in a space with an electric vehicle charging station that is marked as "electric vehicle parking while charging only" if such electric vehicle is not in the process of charging.
- C. Electric vehicles may be parked in any space designated for public parking, subject to the restrictions that would apply to any other vehicle that would park in that space.
 - D. For purposes of this Section, the following definitions apply:
- 1. "Electric vehicle" means any vehicle that operates, either partially or exclusively, on electrical energy from an off-board source, that is stored on-board for motive purpose. "Electric vehicle" includes:
- a. Any "battery electric vehicle," defined as any vehicle that operates exclusively on electrical energy from an off-board source that is stored in the vehicle's batteries, and produces zero tailpipe emissions or pollution when stationary or operating;
- b. Any "plug-in hybrid electric vehicle (PHEV)," defined as an electric vehicle that a) contains an internal combustion engine and also allows power to be delivered to drive wheels by an electric motor; b) charges its battery primarily by connecting to the grid or other off-board electrical source; c) may additionally be able to sustain battery charge using an on-board internal-combustion-driven generator; and 4) has the ability to travel powered by electricity;



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c. Any "neighborhood electric vehicle," defined as a self-propelled,
electrically powered four-wheeled motor vehicle whose speed attainable in one mile is more
than 20 miles per hour and not more than 25 miles per hour and conforms to federal regulations
set forth in 49 C.F.R Sec. 571.500;
d. Any "medium-speed electric vehicle," defined as a self-propelled,
electrically powered four-wheeled motor vehicle, equipped with a roll cage or crush-proof
body design, whose speed attainable in one mile is more than 25 miles per hour but not more
than 35 miles per hour and otherwise meets or exceeds the federal regulations set forth in 49
C.F.R. Sec. 571.500.
2. "Electric vehicle charging station" means a public parking space that is
served by battery charging station equipment that has as its primary purpose the transfer of
electric energy (by conductive or inductive means) to a battery or other energy storage device
in an electric vehicle, and that is 1) publicly owned and publicly available (e.g., Park & Ride
parking, public library parking lot, on-street parking), or 2) privately owned and publicly
available (e.g., shopping center parking, non-reserved parking in multi-family parking lots).
3. "Electric vehicle parking space" means any marked parking space that
identifies the use to be exclusively for the parking of an electric vehicle.
4. "Non-electric vehicle" means any motor vehicle that does not meet the
definition of "electric vehicle".
Section 4: Section 17.04.030 of the Seattle Municipal Code, last amended by Ordinance
118804, is amended as follows:
17.04.030 Director – Powers and duties



The Director shall be the head of the Seattle Center Department and shall, on behalf of

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A. ((,-e))Enter into such contracts, leases, concessions and other agreements as are authorized by ordinance and are related to the Seattle Center, Seattle Parking Garage and the Monorail System other than agreements for the furnishing or delivery (or both) of natural gas or any alternative form of energy to or for a Seattle Center facility((,-));

- <u>B.</u> ((The Director shall a)) Appoint and remove, subject to applicable civil service provisions, and supervise and control all officers and employees in his/her Department;
- <u>C.</u> ((shall a)) Advertise events and publicize and otherwise promote the use of Seattle Center facilities;
- D. Set rates for publicly available electric vehicle charging stations in parking facilities owned or controlled by the Department:
- 1. A per-session fee for public use of electric vehicle charging stations in parking facilities owned or controlled by the Department shall be within rate limits established by this subsection 17.04.030.D. In setting rates, the Director is not subject to Chapter 3.02 of the Seattle Municipal Code.
- 2. Such per-session fees shall be set based on expected operating costs and expected vehicle charging station use. For the purpose of this sub-section, "operating costs" shall include electricity costs related to the charging stations, and may include the Department's costs of planning and administration, fees charged by vendors for management services and routine maintenance of the charging stations, facility enforcement costs and other reasonable costs associated with vehicle charging station operations.
- 3. The Director is authorized to set electric vehicle charging station fees up to \$7.50 per session (Maximum electric vehicle charging station per-session fee). When charging fees are in effect, per-session fees shall be set no lower than \$1.50 per session (Minimum electric vehicle charging station per-session fee). All electric vehicle charging station fees will be in addition to general parking fees and inclusive of any taxes. After December 31, 2016, the



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Director is authorized to set electric vehicle charging station fees without regard to the maximum and minimum electric vehicle charging station per-session fees set forth in this subsection.

<u>E.</u> ((shall s))Seek to obtain reasonable revenue from the use of properties under his/her jurisdiction;

- F. ((shall k))Keep a current inventory of all property under his/her jurisdiction;
- <u>G.</u> ((shall 1))<u>L</u>ay out, direct, construct, and/or supervise all the public works of the Seattle Center, the Seattle Center Parking Garage and the Monorail System; <u>and</u>
- <u>H.</u> ((and shall, t)) Through the Mayor, make a quarterly report to the City Council of the revenues and expenses related to the administration and operation of the Seattle Center, the Seattle Center Parking Garage and the Monorail System.

The Director shall be responsible to the Mayor for the administration of the Department.

Section 5. Section 18.28.010 of the Seattle Municipal Code, last amended by Ordinance 123469, is amended as follows:

18.28.010 Fee schedule established

A. The Superintendent of Parks and Recreation is authorized to charge the fees substantially in the form set forth in the fee schedule attached as Attachment 1 to ((the ordinance introduced as Council Bill 117000))Ordinance 123469, and entitled "Seattle Department of Parks and Recreation Fee Schedule, 2011-2012 Fees and Charges," for all uses of Department of Parks and Recreation facilities identified therein.

B. The Superintendent is also authorized to waive or reduce such fees, establish experimental rates, and engage in special promotional and marketing activities described in Attachment 1 as conditioned in Sections 18.28.020 through 18.28.040 hereof. This 2011-2012 fee schedule supersedes all prior fee schedules to the extent inconsistent therewith. All fees and charges shall remain in effect unless they are repealed or amended by ordinance.



2.8

C. The Superi	ntendent is authoriz	zed to set rates for	publicly availabl	<u>e electric vehicle</u>
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charging stations in p	arking facilities ow	ned or controlled	by the Departmen	nt:

- 1. A per-session fee for public use of electric vehicle charging stations in parking facilities owned or controlled by the Department shall be within rate limits established by this subsection 18.28.010.C. In setting rates, the Superintendent is not subject to Chapter 3.02 of the Seattle Municipal Code.
- 2. Such per-session fees shall be set based on expected operating costs and expected vehicle charging station use. For the purpose of this sub-section, "operating costs" shall include electricity costs related to the charging stations, and may include the Department's costs of planning and administration, fees charged by vendors for management services and routine maintenance of the charging stations, facility enforcement costs and other reasonable costs associated with vehicle charging station operations.
- 3. The Superintendent is authorized to set electric vehicle charging station fees up to \$7.50 per session (Maximum electric vehicle charging station per-session fee). When charging fees are in effect, per-session fees shall be set no lower than \$1.50 per session (Minimum electric vehicle charging station per-session fee). All electric vehicle charging station fees will be in addition to general parking fees and inclusive of any taxes. After December 31, 2016, the Superintendent is authorized to set electric vehicle charging station fees without regard to the maximum and minimum electric vehicle charging station per-session fees set forth in this subsection.
- **Section 6.** The Seattle City Librarian is authorized to set rates for publicly available electric vehicle charging stations in parking facilities owned or controlled by the Library Department:



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A. A per-session fee for public use of electric vehicle charging stations in parking facilities owned or controlled by the Library Department shall be within rate limits established by this Section. In setting rates, the Librarian is not subject to Chapter 3.02, Administration of the Seattle Municipal Code.

B. Such per-session fees shall be set based on expected operating costs and expected vehicle charging station use. For the purpose of this sub-section, "operating costs" shall include electricity costs related to the charging stations, and may include the Department's costs of planning and administration, fees charged by vendors for management services and routine maintenance of the charging stations, facility enforcement costs and other reasonable costs associated with vehicle charging station operations.

C. The Librarian is authorized to set electric vehicle charging station fees up to \$7.50 per session (Maximum electric vehicle charging station per-session fee). When charging fees are in effect, per-session fees shall be set no lower than \$1.50 per session (Minimum electric vehicle charging station per-session fee). All electric vehicle charging station fees will be in addition to general parking fees and inclusive of any taxes. After December 31, 2016, the Librarian is authorized to set electric vehicle charging station fees without regard to the maximum and minimum electric vehicle charging station per-session fees set forth in this subsection.

Section 7. Any act consistent with the authority of this ordinance taken after its passage and prior to its effective date is hereby ratified and confirmed.

Section 8. This ordinance shall take effect and be in force 30 days after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.



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2	Passed by the City Council the	day of	, 2011, ar	nd signed by me in
3	open session in authentication of its passa	age this	day of	, 2011.
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6		Presiden	t Richard Conlin o	f the City Council
7				-
8	Approved by me this	day of	, 2011.	
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11-		Michael	McGinn, Mayor	
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16	,	Monica N	Martinez Simmons	, City Clerk
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FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	CBO Analyst/Phone:
Office of Sustainability and	Sandra Pinto de Bader – 4-	Joe Regis – 5-0087
Environment	3194	

Legislation Title:

AN ORDINANCE relating to the charging of electric vehicles; authorizing the Director of Finance and Administrative Services, the Director of the Seattle Center Department, the Superintendent of Parks and Recreation, and the Seattle City Librarian to set per-session fees for public use of electric vehicle charging stations in parking facilities owned or controlled by each of their respective departments; making it an infraction and imposing a monetary penalty for an unauthorized vehicle to park in a space reserved for electric vehicle parking while charging; amending Sections 3.39.020, 11.31.121, 17.04.030, and 18.28.010 of the Seattle Municipal Code; adding new Section 11.72.125 to the Seattle Municipal Code; and ratifying and confirming certain prior acts.

Summary of the Legislation:

This Ordinance gives authority to the directors of the departments of Finance and Administrative Services, Seattle Center, Parks and Recreation, and Library to set per-session fees for public use of electric vehicle charging stations in parking facilities owned or controlled by their Departments.

This Ordinance also makes it an infraction and imposes a monetary penalty for unauthorized vehicle parking in a space reserved for electric vehicle parking only while charging.

Background:

(Include a brief description of the purpose and context of legislation and include record of previous legislation and funding history, if applicable.) Greenhouse gas (GHG) emissions from cars and trucks are Seattle's largest source of climate pollution, accounting for approximately 40 percent of the city's carbon footprint. To shrink our transportation footprint, the City of Seattle is pursuing a two-part strategy. The first part focuses on increasing investment in transportation choices so that residents and businesses can walk, bike, or take transit. The second part focuses on improving vehicle efficiency so that cars and trucks have a smaller greenhouse gas impact. Plug-in electric vehicles (EV) represent a big step forward in efficiency.

The City has been working on electric vehicle readiness for several years. During the 2009 budget process, City Council issued a Statement of Legislative Intent (SLI) directing Seattle City Light (SCL) to explore policies and procedures that would encourage and accommodate the use of plug-in electric vehicles in Seattle. The response to the SLI was prepared jointly by Office of Sustainability and Environment (OSE) and SCL.

The Plug-in Ready Interdepartmental Team, coordinated by OSE, has done work to streamline



the permitting process and provide consumer information for installing charging stations in single and multi-family buildings; to develop building and land use code changes, where necessary, to encourage installation of charging stations; to identify potential charging station locations on City property; to explore electricity load and distribution constraints and opportunities; to coordinate with surrounding cities and King County to develop a regional EV infrastructure strategy; to explore market demand for EVs and the infrastructure needs for EV purchasers; and to provide education on the benefits of EVs.

As electric vehicles continue arriving to Seattle's streets, it's important to build a robust EV charging infrastructure network. To that effect, Seattle has been the beneficiary of American Recovery and Reinvestment Act funds through the EV Project, working on private property, and the Puget Sound Clean Air Agency. In October 2009, City Council issued Council Bill 116993 to accept grant funds to purchase and install electric vehicle charging infrastructure. Those funds are being used to install EV charging stations for our fleet's use and to install a number of publicly available EV charging stations in City parking facilities such as the Seattle Center's Fifth Avenue garage, the Central Library, the SeaPark building, and the Pacific Place garage. The Department of Finance and Administrative Services (FAS) is currently in the process of installing those charging stations.

Approximately 20 publicly available charging stations will be located in City owned or managed parking facilities. ARRA funds cover equipment purchase and installation, not ongoing maintenance, operational, or electricity costs. Establishing a per-session fee for public use of City EV charging stations, within the minimum (\$1.50) and maximum (\$7.50) levels established by Council, and giving City departments authority to set fees the City will be able to recover operational, maintenance, and electricity costs with a revenue neutral approach.

The proposed fee range is based on maintenance costs, vendor costs, and electricity. The model looks at scenarios that assume \$0.08 per kilowatt hour; monthly charges and transaction fees by vendors; three routine maintenance levels (\$150, \$200, and \$500/year); and daily usage of charging stations ranging from 'zero charges per day' to 'three charges per day'. Damages due to vandalism are not considered in the routine maintenance assumption, and because charging stations were purchased with ARRA grant funds, replacement value recovery is not included in the cost model (See Attachment A).

Please check one of the following:

This legislation does not have any financial implications.

(Please skip to "Other Implications" section at the end of the document and answer questions a-h. Earlier sections that are left blank should be deleted. Please delete the instructions provided in parentheses at the end of each question.)

This legislation has financial implications.

(If the legislation has direct fiscal impacts (e.g., appropriations, revenue, positions), fill out the relevant sections below. If the financial implications are indirect or longer-term, describe them in narrative in the "Other Implications" Section. Please delete the instructions provided in parentheses at the end of each title and question.)

Appropriations: N/A



(This table should reflect appropriations that are a direct result of this legislation. In the event that the project/programs associated with this ordinance had, or will have, appropriations in other legislation please provide details in the Appropriation Notes section below. If the appropriation is not supported by revenue/reimbursements, please confirm that there is available fund balance to cover this appropriation in the note section.)

Fund Name and Number	Department	Budget Control Level*	2011 Appropriation	2012 Anticipated Appropriation
TOTAL				

^{*}See budget book to obtain the appropriate Budget Control Level for your department.

Appropriations Notes: N/A

Anticipated Revenue/Reimbursement Resulting from this Legislation:

(This table should reflect revenues/reimbursements that are a direct result of this legislation. In the event that the issues/projects associated with this ordinance/resolution have revenues or reimbursements that were, or will be, received because of previous orfuture legislation or budget actions, please provide details in the Notes section below the table.)

Fund Name and Number	Department	Revenue Source	2011 Revenue	2012 Revenue
Library General Fund	Library	Per-session fee for public use of City electric vehicle charging stations	\$950	\$1,950
Seattle Center General Fund	Seattle Center	Per-session fee for public use of City electric vehicle charging stations	\$950	\$1,950
FAS General Fund	FAS	Per-session fee for public use of City electric vehicle charging stations	\$4,500	\$9,000
TOTAL			\$6,400	\$12,900

Revenue/Reimbursement Notes:

The proposed per-session fee range of \$1.50 (minimum) and \$7.50 (maximum) is based on maintenance costs, vendor costs, and electricity. The model considers scenarios that assume:

- \$0.08 per kilowatt hour (\$1.92 for a full charge on a 24 kilowatt hour battery pack)
- Monthly charges and transaction fees by vendors (\$336/year)
- Three routine maintenance levels (\$150, \$200, and \$500/year), and
- Four scenarios for daily usage of charging stations ranging from 'zero charges per day' to 'three charges per day'
- 2011 revenue reflects only six months of operations

The cost spread resulting from this model yielded a lower-end per-session cost of \$2.36 and on the higher-end \$4.21. All scenarios considered vehicles would be charging a fully depleted battery, thus maximizing electricity use of \$1.92. In reality vehicles will be using charging stations to charge their cars at different levels based on load left in their battery pack. Not all vehicles will be charging a completely depleted battery pack.



The per-session minimum fee proposed (\$1.50) would give flexibility to departments to set the fee low enough to recover electricity while incentivizing use of the charging stations, especially at the beginning stages. The maximum (\$7.50) is set high enough to allow departments to adjust fees based on experience and potentially recover cost of damages due to vandalism or, if in the future, the City decided to invest in additional EV charging infrastructure, it would allow for replacement value recovery.

The following assumptions were made in calculating revenue (see Attachment B):

- \$3.50 per-session fee
- Three charging stations installed in the Seattle Center Fifth Avenue garage
- Three charging stations installed in the Central Library garage
- 14 charging stations installed in various parking facilities managed by FAS
- 50% of charging stations in use an average of once per day

Total Regular Positions Created, Modified, or Abrogated through this Legislation, Including FTE Impact: N/A

(This table should only reflect the actual number of positions affected by this legislation. In the event that positions have been, or will be, created as a result of other legislation, please provide details in the Notes section below the table.)

Position Title and Department	Position # for Existing Positions	Fund Name & #	PT/FT	2011 Positions	2011 FTE	2012 Positions*	2012 FTE*
.,							
TOTAL							

^{* 2012} positions and FTE are <u>total</u> 2012 position changes resulting from this legislation, not incremental changes. Therefore, under 2012, please be sure to include any continuing positions from 2011.

Position Notes: N/A

Do positions sunset in the future? N/A

(If yes, identify sunset date)

Spending/Cash Flow:

(This table should be completed only in those cases where part or all of the funds authorized by this legislation will be spent in a different year than when they were appropriated (e.g., as in the case of certain grants and capital projects). Details surrounding spending that will occur in future years should be provided in the Notes section below the table.)

Fund Name & #	Department	Budget Control Level*	2011 Expenditures	2012 Anticipated Expenditures
Library General Fund	Library	B1ADM	\$1,000	\$2,000
Seattle Center General Fund	Seattle Center	SC670	\$1,000	\$2,000
FAS General Fund	FAS	A2000	\$4,600	\$9,300
TOTAL			\$6,600	\$13,300

^{*} See budget book to obtain the appropriate Budget Control Level for your department.



Spending/Cash Flow Notes:

The following assumptions were made in calculating spending:

- Vendor fees include cell phone service (\$13/month) and revenue collection (\$15/month)
- Using currently contracted routine maintenance fee of \$150 per charging station per year
- Assuming \$0.08/kWhr, 50% battery charge on a 24 kWhr battery pack (\$0.96), and use of 50% of available stations once per day

Cost assumptions will be compared in the future to data gathered by the charging stations and fees will be adjusted accordingly if necessary.

Other Implications:

a) Does the legislation have indirect financial implications, or long-term implications? (If yes, explain them here.)

Charging a per-session fee will allow for the City to recoup expenses for providing this service to the public. This first phase of publicly available EV charging infrastructure was funded by federal ARRA grant monies. In the future, if the City decides to invest in additional charging infrastructure, charging for the use of EV charging stations will allow for a sustainable program.

b) What is the financial cost of not implementing the legislation?

(Estimate the costs to the City of not implementing the legislation, including estimated costs to maintain or expand an existing facility or the cost avoidance due to replacement of an existing facility, potential conflicts with regulatory requirements, or other potential costs.)

The financial cost to the departments of not implementing this legislation would be over \$13,000. The charging stations were purchased and are being installed using federal ARRA funds. Without the ability to collect per-session fees, departments won't have a way to recuperate costs.

c) Does this legislation affect any departments besides the originating department? (If so, please list the affected department(s), the nature of the impact (financial, operational, etc), and indicate which staff members in the other department(s) are aware of the proposed legislation.)

Finance and Administrative Services (Chris Wiley and Jason Phillips) – operational and financial impacts. FAS is installing the EV charging stations and will be managing the vendor contract. Some of the garages that will have charging stations are managed by FAS.

Seattle Center (Layne Cubell) – operational and financial implications since the Seattle Center will be receiving and managing three charging stations.

Library (Tim Morrison) – operational and financial implications since the Library will be receiving and managing three charging stations.

Parks and Recreation (David Broustis) – future operational and financial implications if the City decides to install charging stations in Parks property.

d) What are the possible alternatives to the legislation that could achieve the same or similar objectives? (Include any potential alternatives to the proposed legislation, such as reducing fee-supported activities, identifying outside funding sources for fee-supported activities, etc.)

The purpose of this legislation is to provide departments with a way to recover costs for installation and operation of publicly available charging stations. An alternative could be to have departments subsidize public EV charging.



e) Is a public hearing required for this legislation?

(If yes, what public hearing(s) have been held to date, and/or what public hearing(s) are planned for the future?)

No

f) Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation?

(For example, legislation related to sale of surplus property, condemnation, or certain capital projects with private partners may require publication of notice. If you aren't sure, please check with your lawyer. If publication of notice is required, describe any steps taken to comply with that requirement.)

No

g) Does this legislation affect a piece of property?

(If yes, and if a map or other visual representation of the property is not already included as an exhibit or attachment to the legislation itself, then you must include a map and/or other visual representation of the property and its location as an attachment to the fiscal note. Place a note on the map attached to the fiscal note that indicates the map is intended for illustrative or informational purposes only and is not intended to modify anything in the legislation.)

No

h) Other Issues:

Electric Vehicle technology is new and the market is in development. Demonstration projects such as the EV Project will be providing usage data in the next couple of years. Analysis of information captured by the City's charging stations will also provide useful insight into EV users patterns and preferences. Setting a wide range of EV charging fees will give the City flexibility to adjust such fees accordingly

List attachments to the fiscal note below:

Attachment A: Rate Structure Analysis for Publicly available EV Charging Stations in City

Property

Attachment B: Publicly available EV Charging Stations in City Property Revenue/Cost

Calculations



OSE Electric Vehicles FISC ATT A Sandra Pinto de Bader August 16, 2011 Version #1

Rate Structure Analysis for Publicly available EV Charging Stations in City Property

Assuming \$150/year routine maintenance costs

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Zero ch	Zero charges per day		1 charg	rge per day		2 charge	2 charges per day	3 char	3 charges per day	
	Monthly Annual	Annual		Monthly	Annual		Monthly Annual		Monthly	Annual
Cell Svc	\$15.00	\$15.00 \$180.00 Cell Svc	Cell Svc	\$15.00	\$180.00 Cell Svc	Cell Svc	\$15.00 \$180.00 Cell Svc	Cell Svc	\$15.00	\$180.00
Rev Coll.	\$13.00	\$13.00 \$156.00 Rev Coll.	Rev Coll.	\$13.00	\$13.00 \$156.00 Rev Coll.	Rev Coll.	\$13.00 \$156.00 Rev Coll.	Rev Coll.	\$13.00	\$13.00 \$156.00
Maintenance	\$12.50	\$150.00	\$12.50 \$150.00 Maintenance	\$12.50	\$150.00	\$12.50 \$150.00 Maintenance	\$12.50 \$150.00 Maintenance	Maintenance	\$12.50	\$12.50 \$150.00
Electricity			Electricity .	\$58.40	\$700.80	\$700.80 Electricity	\$116.80 \$1,401.60 Electricity	Electricity	\$175.20	\$175.20 \$2,102.40
Total	\$40.50	\$40.50 \$486.00 Total	Total	\$98.90	\$98.90 \$1,186.80 Total	Total	\$157.30 \$1,887.60 Total	Total	\$215.70	\$215.70 \$2,588.40
Per session cost	e/u		Per session cost	£\$	\$3.25	Per session cost	\$2.59	Per session cost	\$2.36	36
									,	

Assuming \$200/year routine maintenance costs	ear routine ma	aintenance	e costs							2000
Zero ch	Zero charges per day		1 charg	1 charge per day		2 charge	2 charges per day	3 charg	3 charges per day	
	Monthly	Annual		Monthly	Annual		Monthly Annual		Monthly	Annual
Cell Svc	\$15.00	\$15.00 \$180.00 Cell Svc	Cell Svc	\$15.00	\$15.00 \$180.00 Cell Svc	Cell Svc	\$15.00 \$180.	\$180.00 Cell Svc	\$15.00	\$180.00
Rev Coll.	\$13.00	\$13.00 \$156.00 Rev Coll.	Rev Coll.	\$13.00	\$156.00	\$156.00 Rev Coll.	\$13.00 \$156.	\$156.00 Rev Coll.	\$13.00	\$156.00
Maintenance	\$16.67	\$200.00	\$16.67 \$200.00 Maintenance	\$16.67		\$200.00 Maintenance	\$16.67 \$200.	\$200.00 Maintenance	\$16.67	\$200.00
Electricity			Electricity	\$58.40		\$700.80 Electricity	\$116.80 \$1,401.60 Electricity	60 Electricity	\$175.20 \$2,102.40	\$2,102.40
Total	\$44.67	\$44.67 \$536.00 Total	Total	\$103.07	3103.07 \$1,236.80 Total	Total	\$161.47 \$1,937.60 Total	60 Total	\$219.87	\$219.87 \$2,638.40
Per session cost	n/a	m	Per session cost	\$3	\$3.39	Per session cost	\$2.65	Per session cost	\$2.41	1

Assulling 3000/year 10utille maintenance costs	משו וסמנווני ווני	מווונטוומווכם	COSES							
Zero ch	Zero charges per day		1 charg	narge per day	2 cha	2 charges per day	I STORY STATE	3 charg	3 charges per day	
Manager Control of Con	Monthly	Annual		Monthly Annual	ıual	Monthly	Annual		Monthly	Annual
Cell Svc	\$15.00	\$15.00 \$180.00 Cell Svc	Cell Svc	\$15.00 \$18	\$180.00 Cell Svc	\$15.00	315.00 \$180.00 Cell Svc	ell Svc	\$15.00	\$180.00
Rev Coll.	\$13.00	\$13.00 \$156.00 Rev Coll.	Rev Coll.	\$13.00 \$15	\$156.00 Rev Coll.	\$13.00	\$13.00 \$156.00 Rev Coll.	ev Coll.	\$13.00	\$156.00
Maintenance	\$41.67	\$500.00	\$41.67 \$500.00 Maintenance	\$41.67 \$50	\$500.00 Maintenance	\$41.67	\$500.00	\$41.67 \$500.00 Maintenance	\$41.67	\$500.00
Electricity			Electricity	\$58.40 \$70	\$700.80 Electricity	\$116.80	3116.80 \$1,401.60 Electricity	lectricity	\$175.20	\$175.20 \$2,102.40
Total	\$69.67	\$69.67 \$836.00 Total	Total	\$128.07 \$1,536.80 Total	36.80 Total	\$186.47	:186.47	otal	\$244.87	\$244.87 \$2,938.40
Per session cost	2/u	-	Per session cost	\$4.21	Per session cost	.0.23		Per session cost	\$2.68	8

Assumptions:

- 1. Electricity cost for a full charge on a 100-mile, 24 kWh battery at \$0.08/kWh = \$1.92
- 2. Three levels of annual routine maintenace are considered: \$150, \$200, \$500
- 3. Damages due to vandalism are not considered in the routine maintenance assumption
- 4. Since charging stations were purchased with federal grant dollars, replacement value recovery is not included in cost model



Publicly available EV Charging Stations in City Property Revenue/Cost Calculations 7/20/2011

Sandra Pinto de Bader OSE Electric Vehicles FISC ATT B July 11, 2011 Version #1

REVENUE

3.50 Proposed per-session fee: Library

Number of charging stations:2

Potential revenue:	Daily	Annual	2011 2012	2
Zero user/day	0	\$0.00		
One user/day	\$10.50	\$3,832.50		
fwo users/day	\$21.00	\$7,665.00		
Three users/day	\$31.50	\$11,497.50		
Projected revenue			\$958.13 \$1,9	\$1,916.25

3.50 Proposed per-session fee: Seattle Center

Number of charging stations:4

Potential revenue:	Daily	Annual	2011 2012
Zero user/day	0	\$0.00	
One user/day	\$10.50	\$3,832.50	
Two users/day	\$21.00	\$7,665.00	
Three users/day	\$31.50	\$11,497.50	
Projected revenue			\$958.13 \$1.016.25

Finance and Administrative Services

Proposed per-session fee:

Number of charging stations:⁵

14

3.50

Potential revenue:	Daily	Annual	2011	2012
Zero user/day	0	\$0.00		
One user/day	\$49.00	\$49.00 \$17,885.00		
Two users/day	\$98.00	\$98.00 \$35,770.00		
Three users/day	\$147.00	\$147.00 \$53,655.00		
Projected revenue			\$4 471 75	¢9 047 E0

\$12,775.00 -\$449.00 -\$224.50 \$6,387.50

Total projected revenue

¹ \$3.50 per-session fee Revenue assumptions:

² Three charging stations installed in the Seattle Center Fifth Avenue garage

³ 50% of charging stations are in use an average of once per day

 4 Three charging stations installed in the Central Library garage

 5 14 charging stations installed in various parking facilities managed by FAS



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Estimated costs:	Daily	i.	6	Annual	2011 2012
Vendor fees7			s	1,008.00	
Routine maintenance8			s	450.00	
Electrícity9	\$	1.44	\$	525.60	

\$1,983.60 \$991.80

Projected costs Seattle Center

Vendor fees	Daily	٧	Annual	2011 2012
Routine maintenance		S	450.00	
Electricity	1.44	\$	525.60	

2001			ጉ	1,000,00		
Routine maintenance			s	450.00		
Electricity	⋄	1.44	S	525.60		
Projected costs					\$991.80	\$1,983.60

Finance and Administrative Services

2012 2011 \$ 4,704.00 \$ 2,100.00 2,452.80 Annual Daily Routine maintenance Estimated costs: Vendor fees Electricity

\$9,256.80 \$4,628.40 Projected costs 10

\$6,612.00 \$13,224.00

Costs assumptions:

 7 Vendor fees include cell phone service \$13/mo .) and revenue collection (\$15/mo)

⁹ Assuming \$0.08/kWhr, 50% charge on a 24kWhr battery (\$0.96), and use of 50% of stations 1/day 8 Using current contracted routine maintenance fee of \$150/charging station/year

 10 2011 costs figure assumes partial year operations





City of Seattle Office of the Mayor

August 16, 2011

Honorable Richard Conlin President Seattle City Council City Hall, 2nd Floor Seattle, WA 98124

Dear Council President Conlin,

I am pleased to transmit the attached proposed Council Bill that gives authority to the directors of the departments of Finance and Administrative Services, Seattle Center, Parks and Recreation, and Library to set per-session fees for public use of electric vehicle charging stations in parking facilities owned or controlled by the City.

Greenhouse gas (GHG) emissions from cars and trucks are Seattle's largest source of climate pollution, accounting for approximately 40 percent of the city's carbon footprint. Plug-in electric vehicles represent a big step forward in efficiency that will allow the City to shrink our transportation footprint.

Large scale adoption of electric vehicles will require a robust EV charging infrastructure network. In 2009, the City received ARRA funds to purchase and install electric vehicle charging infrastructure. Those funds are being used to install EV charging stations for our fleet's use and to install approximately 20 publicly available EV charging stations in City parking facilities such as the Seattle Center's Fifth Avenue garage, the Central Library, the SeaPark building, and the Pacific Place garage. The Department of Finance and Administrative Services (FAS) is currently in the process of installing those charging stations.

This legislation also proposes establishing a minimum and a maximum per-session fee for public use of City EV charging stations; and imposes a monetary penalty for unauthorized vehicle parking in a space reserved for EV parking.

Establishing a per-session fee for public use of City EV charging stations will provide the City with the authority to recover operational, maintenance, and electricity costs for public EV charging.

Thank you for your consideration of this legislation. Should you have questions, please contact Jill Simmons (4-9261) or Sandra Pinto de Bader (4-3194).

Sincerely

Darryl Smith

Deputy Mayor

A. Amet For Michael Mebina Mayor of Scattle

Copy: Honorable members of the Seattle City Council

Office of the Mayor Seattle City Hall, 7th Floor 600 Fourth Avenue PO Box 94749 Seattle, WA 98124-4749

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